Shared knowledge in complex teams

Propositions regarding the dissertation

Shared Knowledge in Complex Teams

An Investigation of the Shared Mental Model Construct

1. Organizations should support teams by providing time and platforms for team members to understand each other's tasks and discuss how to cooperate, so that these team members develop and maintain shared knowledge structures and perform effectively as a team (this dissertation).

2. Inexperienced team members who have less than 10 years of work experience are more sensitive to external circumstances – such as the organizational context – during the development of shared knowledge structures than experienced team members (this dissertation).

3. Due to providing structured and guided breaks in task execution, team members that work in a datalink setting can both profit from concise communication via text-based messages while still being able to develop shared knowledge about their team functioning (this dissertation).

4. While a shared mental model and standardized communication between team members contribute to effective team performance, these team characteristics are limited in helping team members in adapting to an unforeseen unique change in the task environment (this dissertation).

5. To understand the shared mental model of a complex team, we must apply multiple methods, such as observations, communication analysis and scenario-based questionnaires, to elicit the shared knowledge structures of the team members.

6. Efficient teamwork within a team and between multiple teams is a prerequisite for successful air traffic management in the future.

7. The whole is greater than the sum of its parts (based on Kurt Koffka, Gestalt psychologist).

8. TeamTris is a potential tool to train team competences of aspirant air traffic controllers early in the training program (this dissertation).

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